



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/587,743

05/16/2007

Stefan Sehlstedt

10400A-000080/US

2255

30593

7590

02/22/2011

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 8910

RESTON, VA 20195

EXAMINER

SCHATZ, CHRISTOPHER T

ART UNIT

PAPER NUMBER

1747

MAIL DATE

DELIVERY MODE

02/22/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,743	<b>Applicant(s)</b> SEHLSTEDT ET AL.	
	<b>Examiner</b> CHRISTOPHER SCHATZ	<b>Art Unit</b> 1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5,7,9 and 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8,10-12,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. The Finality of the Office Action dated 11/26/2010 has been withdrawn and prosecution is hereby reopened.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 10, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardin et al. (WO 95/21690).

As to claims 1-4, Gardin discloses an isostatic press, comprising: a pressure chamber for accommodating a pressure medium 6, the pressure chamber being enclosed by a cylindrical element that is force-absorbing body 3; a prestressing device 1, provided around an outer envelope surface of the force-absorbing body (figures 1 and 4), the force-absorbing body thereby being radially prestressed (page 10, lines 31-35; page 7, lines 6-16); and at least one tunnel-like passage 14 running essentially over the length of said outer envelope surface of the force-absorbing body (figure 3; page 5, lines 23-26), the tunnel-like passage being defined by a groove in said outer envelope surface of the force-absorbing body and a portion of said prestressing device covering said groove,

Art Unit: 1747

capable of conducting pressure medium to a point of detection if such medium has leaked out from the pressure chamber to the outer envelope surface of the force-absorbing body (page 3, lines 25-32). The applicant should note that the cylindrical element 3 reads on the term “force-absorbing body” as such is capable of absorbing at least a minor amount of force. Applicant is specifically referred to page 10, lines 31-35, which discloses that the force absorbing body 3 can be in direct contact with an outermost cylindrical element. Because this cylindrical element is partially prestressed when the force-absorbing body is inserted, the cylindrical element imparts stress on the force-absorbing body and thus reads on a prestressing device. In this embodiment, the passages 14 shown in figure 3 will be defined by the groove in the force absorbing body 3 and the prestressing device 1, because 3 will be placed directly within the prestressing device 1. It should also be noted that the conical shape of the inner portion of said cylindrical element 1 will at least partially prestress the force-absorbing body as it is inserted. Additionally, the cylindrical element is a force absorbing cylindrical wall of a pressure vessel.

As to claim 19, at least a portion of said prestressing device is in contact with portions of the outer envelope surface that form the groove. As to claim 20, a single pre-stressing device 1 is directly on the on the outer envelope surface. As to claim 10, Gardin discloses an isostatic press wherein said at least one tunnel-like passage runs in the form of a spiral around said outer envelope surface and essentially along the whole of its length (figure 1; page 5, lines 23-26).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gardin.

As to claims 11 and 12, Gardin discloses channels as discussed in claim 10 above. The examiner interprets use of the plural term "channels" as a disclosure that there are more than one parallel tunnel-like passages running in the form of a spiral around said outer envelope surface and essentially along the whole of its length. Nonetheless, one of ordinary skill in the art would have appreciated to use at least two parallel tunnel-like passages as doing such would aid in accurately and quickly determining if a leak is present. At the time the invention was made it would have been obvious to one of ordinary skill in the art to have at least two tunnel-like passages running in parallel in the form of a spiral around said outer envelope surface and essentially along the whole of its length as such would achieve the advantages discussed above.

Art Unit: 1747

5. Claims 1-4, 6, 8, 10-12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maerz (US 2002/0076347) in view of Yoneda (US 2004/0004314, newly cited) and further in view of Gardin.

As to claims 1 and 2, Maerz discloses an isostatic press, comprising: a pressure chamber for accommodating a pressure medium 6, the pressure chamber being enclosed by a cylindrical element (figure 1, paragraph 0033).

It is not clear if Maerz discloses an isostatic press further comprising: a prestressing device provided around an outer envelope surface of the force-absorbing body, the force-absorbing body thereby being radially prestressed; and at least one tunnel-like passage running essentially over the length of said outer envelope surface of the force-absorbing body, the tunnel-like passage being defined by a groove in said outer envelope surface of the force-absorbing body and a portion of said prestressing device covering said groove, for conducting pressure medium to a point of detection if such medium has leaked out from the pressure chamber to the outer envelope surface of the force-absorbing body.

Yoneda discloses a press having a pressure chamber for accommodating a pressure medium, the chamber being enclosed by a force absorbing body 2, and a prestressing device 3 provided around an outer envelope surface of a force-absorbing body 2, the force-absorbing body thereby being radially prestressed (figures 1, 7a, 7b, paragraphs 0065-0068). Prestressing is known and preferable in the art since it provides radial stress to the force-absorbing body. Yoneda further discloses that it is beneficial to form passages 3b essentially running over the length of said outer envelope surface and between the

Art Unit: 1747

prestressing device and the outer envelope surface of the force-absorbing body 2, said passages for conducting fluid to a point of detection if fluid has leaked to the outer surface envelope surface of the force absorbing body (figures 7a, 7b, paragraphs 0081-0084). The presence of said passages enables detection of fluid leakage, and thus it is possible to detect any cracks in the force-absorbing body and reduce the risk of a serious accident due to a cracked force-absorbing body (paragraphs 0081-0084). At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the press of Maerz such that a prestressing device is provided around the outer envelope surface of the force-absorbing body, the force-absorbing body being radially prestressed, and at least one passage is essentially running over the length of said outer envelope surface and between the prestressing device and the outer envelope surface of the force-absorbing body, wherein said passage is for conducting pressure medium to a point of detection if such medium has leaked out from the pressure chamber to the outer envelope surface of the force-absorbing body as taught by Yoneda above in order to achieve the benefits discussed above.

Yoneda discloses that the passage is formed in the surface of the prestressing device rather than the force-absorbing body. However, Gardin discloses that when forming a passage for conducting pressure medium on an outer envelope surface of a force-absorbing body, the passage can either be formed by a groove in said outer envelope surface, a groove in the inner surface of the device covering said outer envelope surface, or both (page 5, lines 15-20). At the time the invention was made it would have been obvious to one of ordinary

Art Unit: 1747

skill in the art to modify the press of Maerz as modified by Yoneda such that the passage is defined by a groove in said outer envelope surface of the force absorbing body and a portion of said prestressing device covering said groove as such is a well known and equivalent alternative to forming the groove or passage in the surface of the prestressing device as taught by Gardin above. Additionally, it would have been obvious to form the passage in a tunnel-like shape as is known in the art and taught by Gardin (page 9, lines 31-33).

As to claims 3 and 4, in the modified press discussed above, the force adsorbing body of Marez is a cylindrical wall of a cylindrical pressure vessel and is a force-absorbing cylindrical wall of a pressure vessel. As to claim 6, Yoneda discloses the prestressing device is at least one of wire-shaped and band-shaped and is wound around said outer envelope surface (paragraphs 0065-0067, figures). As to claim 8, Maerz discloses supplying the pressure medium by a pumping device 8 (paragraph 0033). One of ordinary skill in the art would have readily recognized to dimension the cross-sectional area of the tunnel-like passage such that said tunnel-like passage is capable of conducting pressure medium flow essentially equal to if not larger than the flow of the medium into the chamber supplied by the pumping device as doing such will enable leaks in the force adsorbing body to be detected quickly. As to claim 10, Gardin discloses the limitations as discussed above. Thus, in the modified press at least one tunnel-like passage will run in the form of a spiral around said outer envelope surface and essentially along the whole of its length. As to claims 11 and 12, Gardin discloses channels as discussed in claim 10 above. The examiner interprets use



Art Unit: 1747

of the plural term "channels" as a disclosure that there are more than one parallel tunnel-like passages running in the form of a spiral around said outer envelope surface and essentially along the whole of its length. Nonetheless, one of ordinary skill in the art would have appreciated to use at least two parallel tunnel-like passages as doing such would aid in accurately and quickly determining if a leak is present. At the time the invention was made it would have been obvious to one of ordinary skill in the art to have at least two tunnel-like passages running in parallel in the form of a spiral around said outer envelope surface and essentially along the whole of its length as such would achieve the advantages discussed above. As to claims 19, Maerz discloses that the force-absorbing member forms the pressure chamber, and Yoneda discloses the prestressing device is in direct contact with the outer envelope surface of the force absorbing body. Because in the modified press the groove will be formed in the outer envelope surface, the prestressing device will be in direct contact with portions of the outer envelope surface that form the groove. As to claim 20, Yoneda discloses the prestressing device is in direct contact with the outer envelope surface of the cylindrical element.

### ***Response to Arguments***

Applicant's arguments filed 01/26/2010 have been fully considered. With respect to applicant's arguments directed at Gardin presented on pages 8 and 9 of the Remarks, such arguments are moot in view of the new ground(s) of rejection. The cylinder 1 can read on the prestressing device as discussed

Art Unit: 1747

above. It is also noted that applicant has not amended the claims to require that the passage is “formed” rather than “defined”. The applicant should be aware that such an amendment would not overcome the prior art.

The applicant argues on page 10 of the Remarks that Gardin’s disclosure at page 7, lines 6-16 prohibits the cylindrical element 1 from being interpreted as a prestressing device. First, the applicant is referring to an embodiment of the reference not relied upon by the examiner. Second, nothing prohibits the cylindrical element 1 from being a high pressure cylinder and a prestressing device. The independent claim does not recite any structural or physical limitations that precludes the cylinder 1 from reading on the term “prestressing device” in the embodiment discussed at page 10, lines 31-35. The examiner agrees that Gardin discloses two embodiments, and the disclosure in the second embodiment that cylinder 1 is further prestressed after insertion of the force-absorbing body 3 does not preclude the cylinder from being partially prestressed before insertion of the force-absorbing body and thus imparting at least partial prestress to the force-absorbing body. Additionally, even if it is not taken that the cylindrical element 1 is not at least partially prestressed before insertion of the force-absorbing body 3, it should be noted that the conical shape of the inner portion of said cylindrical element 1 will at least partially prestress the force-absorbing body as it is inserted. See discussion of claim 1 above. The remainder of the applicant’s arguments are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER SCHATZ whose telephone number is (571)272-6038. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER SCHATZ/  
Examiner, Art Unit 1747